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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,092	02/17/2004	Heinz-Hermann Wippersteg	2859	6333

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EXAMINER

LO, SUZANNE

ART UNIT	PAPER NUMBER
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2128

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/781,092

Applicant(s)

WIPPERSTEG ET AL.

Examiner

Suzanne Lo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 17-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 17-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 January 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-14, 17-23 have been presented for examination.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, specifically, there is no tangible result. While adjustable parameters are optimized, the parameters still remain in the abstract with no real world output. The term "optimizing" does not require the output of the actual parameters, but rather, only a logical selection or a mathematical calculation with no real world output.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2, 7, 11-12, 14, and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Also, the claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

In claim 23, it is unclear what is defined by the term "questioning" in the second line of the claim.

Claims 7, 11-12 all recite a list of component limitations after the phrase "using as" without reciting what these components are used as.

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Claims 2 and 14 contain redundant language in recitation of a group limitation containing several elements and the limitation of both elements or a combination of those elements wherein the group inherently contains more a group of more than one element.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2, 17-22 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Bischoff (U.S. Patent No. 6,726,559 B2).

As per claim 1, Bischoff is directed to a method of optimization of adjustable parameters of at least one machine, comprising the *following* steps; providing a data processing system; optimizing adjustable parameters by processing of at least one process algorithm provided in the data processing system (**column 2, lines 13-31**); *selecting the process algorithm to be processed from a plurality of process algorithms (column 5, lines 42-47) proposing or automatically selecting a process algorithm by the data processing system depending on data selected from the group consisting of machine-internal data, machine-external data, and target data (column 5, lines 34-61).*

As per claim 2, Bischoff is directed to a method as defined in claim 1; and further comprising the *step of* determining the optimization of the adjustable *parameters* by target data selected from the group consisting of editable target data, storable target data, and both (**column 4, line 60 – column 5, line 12**).

As per claim 17, Bischoff is directed to a method as defined in claim 1; and further *comprising the step of* defining situation patterns for the process algorithms by at least a part of data selected from the group consisting of machine-internal data, machine-external data, target data and combinations thereof **(column 6, lines 49-65)**; and selecting a situation pattern which comes close or is identical to an instantaneous situation pattern and a process algorithm linked to the situation pattern, depending on the at least one part of the machine-interior data and machine-exterior data with consideration of the target data which defines at least a part of an instantaneous situation pattern **(column 6, lines 45-49)**.

As per claim 18, Bischoff is directed to a method as defined in claim 1; and further comprising *the step of generating changed process algorithms* generation by the data processing system depending on machine-interior data and machine-exterior data and with consideration of changeable target data **(column 5, lines 34-61)**.

As per claim 19, Bischoff is directed to a method as defined in claim 1; and further comprising *the step of* generating changed situation patterns by the data processing system in dependence on machine-interior data and machine-exterior data and with consideration of changeable target data **(column 6, lines 45-65)**.

As per claim 20, Bischoff is directed to a method as defined in claim 1; and further comprising *the step of* storing process algorithms, situation patterns or both in data sets, *wherein the data sets* include at least a part of machine-internal data, machine-external data and target data **(column 6, lines 49-65)**.

As per claim 21, Bischoff is directed to a method as defined in claim 1; and further comprising *the step of* incorporating in data processing system situation patterns and associated process algorithms and/or optimized adjustable parameters to be available for further machines **(column 4, line 60 – column 5, line 12)**.

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As per claim 22, Bischoff is directed to a method as defined in claim 1, wherein the machine is an agricultural harvester; and further comprising *the step of* determining at least one process algorithm depending on harvesting conditions of the agricultural harvester (**Figure 2 and accompanying text**).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. **Claims 3-14, and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Bischoff (U.S. Patent No. 6,726,559 B2) in view of **Weigelt et al. (U.S. Patent No. 5,712,782)**.

Bischoff is directed to a method as defined in claim 1 but fails to explicitly disclose further comprising *the step of* forming the data processing system as a diagnosis system. Weigelt teaches forming the data processing system as a diagnosis system (**column 6, lines 13-24**). It would have been obvious at the time of the invention to combine the method of optimization of adjustable parameters of at least one machine of Bischoff with the machine processing system of Weigelt in order to maintain a machine at an operational optimum (**Weigelt, column 4, lines 56-58**).

As per claim 4, the combination of Bischoff and Weigelt already discloses a method as defined in claim 1; and further comprising *the step of* processing machine-internal data *with the data processing system* and machine-external data with consideration of target data, and generating further-processible output data (**Weigelt, column 7, lines 1-39**).

As per claim 5, the combination of Bischoff and Weigelt already discloses a method as defined in claim 4; and further comprising *the step of* editing and storing the machine-internal data, the machine-external data and the output data by the data processing system (**Weigelt, column 7, lines 1-39**).

As per claim 6, the combination of Bischoff and Weigelt already discloses a method as defined in claim 1; and further comprising *the step of* operating the data processing system in a time controlled manner (**Weigelt, column 5, lines 24-33**).

As per claim 7, the combination of Bischoff and Weigelt already discloses a method as defined in claim 4; and further comprising using as the machine-internal data *one of* the adjustable *parameters* to be optimized, a further parameter and an internal expert knowledge (**Weigelt, column 7, lines 30-39**).

As per claim 8, the combination of Bischoff and Weigelt already discloses a method as defined in claim 7; and further comprising *the step of* using a traveling speed, a rotary speed of at least one

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threshing drum and/or the rotary speed of a blower of at least one cleaning device *as the adjustable parameters to be optimized* (Weigelt, column 5, lines 24-33).

As per claim 9, the combination of Bischoff and Weigelt already discloses a method as defined in claim 7; and further comprising *the step of* using a crop-specific and/or machine-specific parameter *as the further parameter*; and performing the determination of the further parameter by sensors which are in operative communication with the machine or by inputting (Weigelt, column 5, lines 48-59).

As per claim 10, the combination of Bischoff and Weigelt already discloses a method as defined in claim 9; and further comprising *the step of* using a parameter selected from the group consisting of a grain loss, a grain throughput, a crop moisture, a crop total throughput and a broken corn portion as the further parameter (Weigelt, column 7, lines 40-55).

As per claim 11, the combination of Bischoff and Weigelt already discloses a method as defined in claim 9; and further comprising *the step of* using as the further parameter adjustment regions for parameters of working units of the machine (Weigelt, column 6, lines 13-24).

As per claim 12, the combination of Bischoff and Weigelt already discloses a method as defined in claim 5; and further comprising *the step of* generating the machine-external data by external systems and using as the machine-external data plant-specific data, geographic data, weather data and/or external expert knowledge (Weigelt, column 2, lines 40-55).

As per claim 13, the combination of Bischoff and Weigelt already discloses a method as defined in claim 12; and further comprising *the step of* using crop and/or data and experience knowledge *as the external expert knowledge and as internal expert knowledge* (Weigelt, column 7, lines 30-39).

As per claim 14, the combination of Bischoff and Weigelt already discloses a method as defined in claim 1; and further comprising *the step of* processing with the at least one process algorithm of the data processing device, of a diagnosis selected from the group consisting of process diagnosis, case

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diagnosis, model-oriented diagnosis, and combination thereof (**Weigelt, column 8, line 60 – column 9, line 7**).

As per claim 23, the combination of Bischoff and Weigelt already discloses a method as defined in claim 1; and further comprising *the step of* adapting the processing algorithm by questioning (**Weigelt, column 8, lines 15-19**).

Response to Arguments

6. Applicant's arguments filed 01/02/07 have been fully considered but they are not persuasive.

7. The 101 rejection of claims 1-14, 17-23 are maintained. While adjustable parameters are optimized, the parameters still remain in the abstract with no real world output. The term “optimizing” does not require the output of the actual parameters, but rather, only a logical selection or a mathematical calculation with no real world output.

8. The 112 rejections of claims 2, 7, and 9 under lack of antecedent basis are withdrawn due to the amendments. However, the other 112 rejections are maintained as the claims have not been amended to resolve the aforementioned issues.

9. Applicant's arguments are unpersuasive because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Applicants fail to explain how claim 1 defines a set of features over Bischoff but rather only state on page 11 of Remarks submitted 01/02/07, “The Applicants respectfully submit that amended claim 1 defines a set of features over both Weigelt and Bischoff by reciting steps directed to “process algorithm management” ” and is directed to **column 5, lines 34-60** of Bischoff cited in the previous Office Action; dated 11/01/06 in reference to “process algorithm management”.

Conclusion

Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. The prior art made of record is not relied upon because it is cumulative to the applied rejection. These references include:

1. U.S. Patent No. 6,622,070 B1 issued to Wacker et al. on 09/16/03.
2. U.S. Patent No. 6,937,939 B1 issued to Shibusawa et al. on 08/30/05.
3. U.S. Patent No. 4,337,611 issued to Mailander et al. on 07/06/82.

11. All Claims are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suzanne Lo whose telephone number is (571)272-5876. The examiner can normally be reached on M-F, 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on (571)272-2297. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Suzanne Lo
Patent Examiner
Art Unit 2128

SL
03/20/07


KAMINI SHAH
SUPERVISORY PATENT EXAMINER